



Jackson Purchase Energy  
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Online at [JPenergy.com](http://JPenergy.com)*

April 2, 2012

Director of Engineering  
Kentucky Public Service Commission  
211 Sower Blvd.  
PO Box 615  
Frankfort, KY 40602-0615

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APR 04 2012

PUBLIC SERVICE  
COMMISSION

RE: Jackson Purchase Energy Corporation: 2011 Annual Reliability Report  
Administrative Case No. 2006-00494

To Whom It May Concern:

Jackson Purchase Energy Corporation respectfully submits the 2011 Annual Reliability Report per the order dated October 26, 2007 in Administrative Case No. 2006-00494.

Please let me know if you have any questions.

Sincerely,

Craig Gerke  
Interim Vice President of Engineering



# KENTUCKY PUBLIC SERVICE COMMISSION

## Electric Distribution Utility Annual Reliability Report

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### SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	Jackson Purchase Energy Corporation
REPORT PREPARED BY	1.2	Craig Gerke
E-MAIL ADDRESS OF PREPARER	1.3	craig.gerke@jpenergy.com
PHONE NUMBER OF PREPARER	1.4	270-442-7321

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### SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	2011
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### SECTION 3: MAJOR EVENT DAYS

TMED	3.1	19.37984803
FIRST DATE USED TO DETERMINE TMED	3.2	1/1/2006
LAST DATE USED TO DETERMINE TMED	3.3	12/31/2010
NUMBER OF MED IN REPORT YEAR	3.4	1

NOTE: Per IEEE 1366 TMED should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

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### SECTION 4: SYSTEM RELIABILITY RESULTS

#### Excluding MED

SAIDI	4.1	181.03
SAIFI	4.2	1.775
CAIDI	4.3	101.977

#### Including MED (Optional)

SAIDI	4.4	257.650
SAIFI	4.5	2.020
CAIDI	4.6	127.850

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#### Notes:

- 1) All duration indices (SAIDI, CAIDI) are to be reported in units of minutes.
  - 2) Reports are due on the first business day of April of each year
  - 3) Reports cover the calendar year ending in the December before the reports are due.
  - 4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, CAIDI, and TMED
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## SECTION 5: OUTAGE CAUSE CATEGORIES Excluding MED

CAUSE CODE DESCRIPTION	SAIDI VALUE	CAUSE CODE DESCRIPTION	SAIFI VALUE
Storms (Non ME Days)	5.1.1 66.29625	Storms (Non ME Days)	5.2.1 0.441393
Line Equipment	5.1.2 40.19351	Line Equipment	5.2.2 0.431252
ROW	5.1.3 17.98433	Substation	5.2.3 0.178181
Substation	5.1.4 12.76072	ROW	5.2.4 0.140941
Cut Out - Line or XFMR	5.1.5 8.241789	Cut Out - Line or XFMR	5.2.5 0.111445
Lightning	5.1.6 7.53088	Animal	5.2.6 0.108601
Public	5.1.7 6.428666	Public	5.2.7 0.092602
Animal	5.1.8 5.011371	Lightning	5.2.8 0.069443
Wire Primary	5.1.9 4.475595	Planned	5.2.9 0.060673
OCR / Breaker	5.1.10 1.959135	Wire Primary	5.2.10 0.030799

## SECTION 6: WORST PERFORMING CIRCUITS

CIRCUIT IDENTIFIER	SAIDI VALUE	MAJOR OUTAGE CATEGORY
4705	6.1.1 1014.178	Storms
4701	6.1.2 981.7876	Storms
3201	6.1.3 743.9869	Line Equipment
4004	6.1.4 719.9869	Storms
505	6.1.5 637.1729	Lightning
3901	6.1.6 586.0229	Storms
4302	6.1.7 582.5928	Storms
4903	6.1.8 560.3454	Storms
4703	6.1.9 521.8356	Storms
5001	6.1.10 519.4277	Storms

CIRCUIT IDENTIFIER	SAIFI VALUE	MAJOR OUTAGE CATEGORY
3901	6.2.1 5.885496	Storms
7705	6.2.2 5.511364	Line Equipment
505	6.2.3 5.471186	Lightning
3201	6.2.4 5.219895	Line Equipment
3104	6.2.5 4.753507	Storms
4705	6.2.6 4.251462	Storms
4204	6.2.7 4.239533	Storms
4703	6.2.8 3.933333	Storms
4701	6.2.9 3.694981	Storms
3102	6.2.10 3.675079	Storms

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## SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

JPEC is satisfied that its current VMP is being implemented properly. Since we have adopted our current four year rotation and become vigilant in our spraying efforts, our right-of-way related outages have remained low when compared to previous years. No changes will be implemented to the plan in the coming year.

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## SECTION 8: UTILITY COMMENTS